

CROSS REFERENCES CITED

PATENT DOCUMENTS

WO 91/11108 Juillard at al. published August 8, 1991

This patent corporation treaty application discloses a process whereby vegetables are vacuum sealed and a prescribed proportion of lemon juice is added to the bag. The vegetables and the lemon juice in the bag are heated to a temperature between 80° to 98° C. The application claims that bags containing vegetables which have been treated in this manner can be kept for periods up to a year at 4° – 6° C . The length of the pasteurization process is between 30 and 120 minutes. At one location , it is stated that the concentration of the lemon juice is between 0.1 and 0.5 %.

Our process does not require the addition of lemon juice even though it might be part of a particular desired flavour profile. Our process does not require a vacuum pack.

EP 0 553 603 A1, Cancarini, published August 8, 1993

This patent discloses a process for vacuum packing fruit in sealed bags. The fruit in the bags is pasteurized at about 90° c for about 15 to 40 minutes. The treated bags are then cooled in cold water to about 4° – 8° C. The patent at one location states that the vacuum is about 90%. It is also stated that a minimum pasteurization process temperature can be about 80° C. It is stated

that fruit, mainly pineapple, treated in this manner lasts for about 90 days under normal refrigeration .

Our process does not require a vacuum. It is also noted that this patent is for fruit and not salads.

U.S. patent No. 5,192,565, Buhler et al. , March 9, 1993

This patent discloses a process whereby vegetables and fruits are heat treated for 1 to 15 minutes at a temperature of between 80° to 95° C to blanch the fruits and vegetables. The blanched fruits and vegetables are then cooled. Subsequently , the blanched and cooled vegetables are fermented with lactic bacteria and water to reach a p.h. of about 3.1 to 4.4 . The fermented vegetables are then pasteurized at about 80° C to about 110° C for 2 to 30 minutes.

Our process requires no fermentation with lactic bacteria.

U.S. patent No. 5,114,733 , Quinet, May 19, 1992

This patent discloses a process whereby an oil emulsion is prepared from oil, emulsifier, stabilizer, thickener and water under vacuum. Egg yolk is then added and the mixture is further emulsified under vacuum. A salad is then prepared combining the oil emulsion and salad ingredients. The mixture is packed into an airtight container and is then pasteurized in an over pressure autoclave. The product is then cooled and overpressure is applied during this process.

Our process does not require that the dressings or oil emulsions have to be made under vacuum and does not require that the pasteurizing and cooling process be performed in an overpressure environment. Temperatures are similar to the standard requirement of any pasteurization process.

U.S. patent 4,832,063, Demeulemeester et al., May 23 1989

This patent discloses vacuum packaging vegetables which are pasteurized for about 5 to 15 minutes at 85° – 95° C . The vacuum packed vegetables are then subjected to a bacterial treatment for 24 – 27 hours . at a temperature of about 25° – 30° C . After bacterial treatment, a second pasteurization step is conducted for 20 to 40 minutes at about 85° to 93° C. The vacuum packed vegetables are then refrigerated.

Our process does not require bacterial treatment.

EP 0 401 939, Quinet , December 12, 1990

This patent is similar to U.S. patent No. 5,114,733 (shown before)

French patent No., 2,784,864, Albino et al., published April 28, 2000

This patent states that storage time of vegetables are increased by pre-cooking and pasteurization. The vegetables are pre-cooked and chilled. The cooked vegetables are then packed in a sauce in a container. The container is then pasteurized under vacuum or under nitrogen blanket . Pasteurization seems to be conducted at about 90 C to 110 C for 10 to 25 minutes.

Our process does not require vacuum or nitrogen blanket .

U.S. Patent No. 4,505,937, Demeulemeester et al., March 19, 1985

This patent is similar to the earlier Demeulemeester et al., patent discussed above. This patent discloses a process whereby root and tuber vegetables (notably potatoes) are lightly sterilized at 75 to 85 C for about 5 to 15 minutes. The lightly sterilized root and tuber vegetables are then packaged in pouches which are cooled to about 40 C by spraying with Water. The root and tuber vegetables are incubated in the pouches at about 25 C for 24 hours. A second pasteurization step is conducted at a temperature of about 85 C for about 30 – 40 minutes. Finally, the root and tuber vegetables in the pouches are refrigerated at 5 C to 15 C for about 3 to 12 hours.

Our process does not require a pre – sterilization process or incubation period.

U.S.patent No. 3,966,980, McGuckian, June 29, 1976

This patent discloses a process of cooking foods in vacuum packages.. Foods such as meat and vegetables, are placed in vacuum pouches and immersed in water at 140° to 212°F until the food is cooked. The packages containing cooked foods are then immersed in chilled water of a temperature of about 32° to 34° F.

Our process does not cook the salad ingredients in the bags. In effect our process avoids cooking to retain crispness of the vegetables.

U.S.patent No. 3,892,058, Komatsu et al., July 1,1975

In this patent , packages filled with food are heated to about 130°C to about 160° C for a short period of time, for example 0.5 to 15 minutes in order to sterilize the food contained in the packages.

Our process could not use these high temperatures as they would impair the quality and emulsion of many of the dressings used in our process. The short heating time in this process would not achieve the necessary core temperatures needed in our process.

DISCLOSURE

Disclosure of this product has been made on December 3, 2002 , when the first product was sold to a customer.